

HILL AFB, UT UTILITY SYSTEM DESCRIPTIONS

General: The main base lies approximately 30 miles north of Salt Lake City adjacent to Interstate 15. Hill AFB includes the main base (6,700 acres), Little Mountain Test Annex (740 acres, 30 Miles distant), the Utah Test and Training Range (UTTR) North and South (954,000 acres, 100 Miles distant) including Bovine Mountain (145 miles distant), Grassy Mountain (92 miles distant), Wendover Peak (150 Miles distant), Carter Creek (105 miles distant), Confusion Peak near Trout Creek (215 miles distant) and Boulder WY (245 miles distant.) These locations include 1546 buildings (14,265,621 SF) set on 961,784 acres. Much of the utility systems on Hill AFB and UTTR is located in an explosive hazard area.

System Descriptions: The following information provided is only an estimate of the size, scope and general description of the electrical, natural gas, potable water, and wastewater utility systems at the base and is subject to change. Utility systems to be privatized are generally described as follows:

Electrical: Power is supplied by Utah Power and Light over two 46.1 kV overhead transmission lines. Other electric providers to remote areas include: Wells Rural Electric, Bridger Valley Electric, Raft River Electric, and Mt. Wheeler Electric. The main base distribution system includes approximately 200 miles of 12.0 kV circuits, two-thirds of which are overhead and one-third underground. The overhead portion is mostly bare copper conductors suspended on wooden poles. The underground portion consists of cable in duct banks, although there is some direct burial cable. Pole- or pad-mounted transformers are used to step the voltage down to the required utilization level. Four substations are controlled by a "Supervisory Controlled Automated Data Acquisition" (SCADA) computer system. Typical utilization voltages are 277/480-volt three-phase, 120/208-volt three-phase and 120/240 volt single-phase. The electrical system includes street and traffic lighting along with airfield lighting and security lighting.

Natural Gas: Gas is delivered to the base at several delivery and metering points around the perimeter of the base by the Questar Gas Company, with the primary supplier being IGI Resources of Idaho. Gas is delivered at a pressure of 350 pounds, while distribution on-base is primarily underground at a pressure of 35 pounds. There are approximately 44 miles of underground piping in sizes ranging from 3/4 to 8 inches, 70 gas meters, and 1500 regulators (200 of which have been recently replaced.) Approximately 80% of the underground system is polyethylene installed in the past ten years. The remaining 20% is 14-year-old steel pipe serving several housing areas. Natural gas is also provided to Little Mountain and UTTR North, each with one delivery point that is regulated and metered.

Potable water: Water is produced on-base by six permitted wells; an additional three wells must be repaired. Water treatment is by chlorination, fluoridation and phosphate added at each well. Supplementary potable water is supplied by the Weber Basin Conservancy District. There are approximately 187 miles of distribution piping in the

main system, including cast iron, ductile iron, asbestos-cement and polyvinyl chloride pipes ranging in size from 1 1/2 to 24 inches in diameter, as well as approximately 13,000 valves. The potable water system includes approximately 1200 back flow preventers, an automated lawn irrigation system and three swimming pools. Storage is provided by one elevated metal tank, two ground level metal tanks, and three below-ground concrete tanks, with tank sizes varying from .8 to 3.5 million gallons. The main system was originally constructed in the 1940's and expanded in the 1950's and 1960's. In addition to the major system on-base, two minor systems serve Little Mountain and UTTR North.

Sanitary Wastewater: The wastewater utility consists of one major system on-base and two minor systems at Little Mountain and UTTR North; these systems were originally constructed in the 1940's and expanded in the 1950's and 1960's. Wastewater from the main base is discharged to the North Davis County sanitary sewer system through four flow meters. The main system includes 19 pump stations, 14 septic tank systems and 4 holding tanks; the main system also includes approximately 200 miles of vitrified clay, polyvinyl chloride and cast iron piping ranging in size from 4 to 15 inches in diameter.

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